

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (cancelled)
2. (currently amended) An isolated nucleic acid ~~variant~~ encoding a polypeptide comprising an amino acid sequence set forth in SEQ ID NO:111, ~~wherein~~ with the exception that the amino acid sequence contains ~~at least one~~ an amino acid change which results from a single nucleotide polymorphism of guanine to adenine at position 21 set forth in SEQ ID NO.: 5969.
3. (cancelled)
4. (currently amended) An isolated nucleic acid ~~variant~~ encoding at least 7 contiguous amino acids of the amino acid sequence according to claim 2, wherein the ~~contiguous~~ contiguous amino acids are not present in the amino acid sequence set forth by SEQ ID NO:111.
5. (currently amended) An isolated nucleic acid ~~variant~~ comprising a nucleotide sequence as set forth in SEQ ID NO.:19, ~~wherein~~ with the exception that the nucleotide sequence contains ~~at least one~~ a single nucleotide polymorphism of guanine to adenine at position 21 ~~selected from the group consisting of SEQ ID NO[[]S.]: 59695955 to 5984.~~
6. (cancelled)
7. (currently amended) An isolated nucleic acid comprising a nucleotide sequence which is 90% identical to the nucleotide sequence according to claim 5.
8. (cancelled)
9. (currently amended) An isolated nucleic acid comprising at least 15 contiguous nucleotides of the nucleotide sequence according to claim 5, wherein the contiguous nucleotides are not present in SEQ ID NO.:19.
10. (cancelled)
11. (currently amended) An isolated nucleic acid comprising a nucleotide sequence which is complementary to the nucleotide sequence of the nucleic acid according to claim 9.
- 12 - 14. (cancelled)
15. (original) A vector comprising the nucleic acid according to claim 4.
16. (original) A vector comprising the nucleic acid according to claim 9.

17. (cancelled)

18. (currently amended) An isolated host cell comprising the vector according to claim 14, wherein the host cell is selected from the group consisting of bacterial, yeast, insect, mammalian, and plant cells.

19. (currently amended) An isolated host cell comprising the vector according to claim 15, wherein the host cell is selected from the group consisting of bacterial, yeast, insect, mammalian, and plant cells.

20 - 30. (cancelled)

31. (original) A pharmaceutical composition comprising the nucleic acid according to claim 11, and a physiologically acceptable carrier, excipient, or diluent.

32 - 33. (cancelled)

34. (original) A pharmaceutical composition comprising the vector according to claim 14, and a physiologically acceptable carrier, excipient, or diluent.

35. (original) A pharmaceutical composition comprising the vector according to claim 15, and a physiologically acceptable carrier, excipient, or diluent.

36-41. (cancelled)

42. (currently amended) An isolated nucleic acid ~~variant~~ comprising at least 15 contiguous nucleotides of a nucleotide sequence set forth in SEQ ID NO.:5969 with the exception that the nucleotide sequence contains a single nucleotide polymorphism of guanine to adenine at position 21, wherein the contiguous nucleotides are not present in SEQ ID NO.:19.

43 - 45. (cancelled)

46. (original) An isolated nucleic acid comprising a nucleotide sequence that is complementary to the nucleotide sequence of the nucleic acid according to claim 42.

47 - 55. (cancelled)

56. (original) A kit for detecting a 12q23-qter nucleotide sequence comprising:  
a) the isolated nucleic acid according to claim 9; and  
b) at least one component to detect hybridization of the isolated nucleic acid to a 12q23-qter nucleotide sequence.

57. (original) A kit for detecting a 12q23-qter nucleotide sequence comprising:  
a) the isolated nucleic acid according to claim 11; and

b) at least one component to detect hybridization of the isolated nucleic acid to a 12q23-qter nucleotide sequence.

58. (original) A kit for detecting a 12q23-qter nucleotide sequence comprising:

a) the isolated nucleic acid according to claim 42; and

b) at least one component to detect hybridization of the isolated nucleic acid to a 12q23-qter nucleotide sequence.

59. (original) A kit for detecting a 12q23-qter nucleotide sequence comprising:

a) the isolated nucleic acid according to claim 46; and

b) at least one component to detect hybridization of the isolated nucleic acid to a 12q23-qter nucleotide sequence.

60-111. (cancelled)

112. (previously presented) A vector comprising the nucleic acid according to claim 42.

113. (cancelled)

114. (previously presented) A vector comprising the nucleic acid according to claim 2.

115. (previously presented) A vector comprising the nucleic acid according to claim 5.

116. (cancelled)

117. (cancelled)

118. (currently amended) An isolated host cell comprising the vector according to claim 112, wherein the host cell is selected from the group consisting of bacterial, yeast, insect, mammalian, and plant cells.

119. (cancelled)

120. (currently amended) An isolated host cell comprising the vector according to claim 114, wherein the host cell is selected from the group consisting of bacterial, yeast, insect, mammalian, and plant cells.

121. (currently amended) An isolated host cell comprising the vector according to claim 115, wherein the host cell is selected from the group consisting of bacterial, yeast, insect, mammalian, and plant cells.

122 - 123. (cancelled)

124. (currently amended) A kit for detecting a 12q23-qter nucleotide sequence comprising:

a) the isolated nucleic acid according to claim 9[[10]]; and

b) at least one component to detect hybridization of the isolated nucleic acid to a 12q23-qter nucleotide sequence.

125. (currently amended) A kit for detecting a 12q23-qter nucleotide sequence comprising:

- a) the isolated nucleic acid according to claim 11[[12]]; and
- b) at least one component to detect hybridization of the isolated nucleic acid to a 12q23-qter nucleotide sequence.